	MONDAY - SUNDAY			6AM -	MID	WEEKEND 6AM - MID					
Ī	Spring 04	Summer 04	Fall 04	Winter 05	Spring 05	Spring 04	Summer 04	Fall 04	Winter 05	Spring 05	
WAAA [1						-			
SHARE	3.3	3 7		3.2	2.6	3 0	3.7		2.9	2 1	
AQH(00) CUME RTG	168 10-7	187	::	163	133	128 5 9	163	**	125 6.2	96	
WBBB	10	''		10.8	. 10.0	, , ,	3.9		0.2	וכ	
SHARE	3.6	3.7 i	• •	3.5		3.0	3.2		3.0	3.4	
AQH(00)	183	187	• •	179	228	128	143	• •	129	150	
CUME RTG	11.7	11.1	• • •	11.6	13 2	5.6	6.4	•••	5.8	6.8	
SHARE	8.0	7.6		7.8	9.4	7.5	7.0		7.8	9.5	
AQH(00)	404	385	• •	395	488	324	315	• •	331	426	
CUME RTG	16.7	14.9	• •	15.7	17 1	10.4	9.5	• • •	10.0	11.1	
WDDD					i i	1	1		1		
SHARE	2.5	2.7	• •	2.1	2.3	3 2	3.4	* *	2.3	2.5	
AQH(00)	124	140		108	120	136	150	• •	97	112	
CUME RTG	7.4	8.4	•••	6.4	7.1	4.7	5.5	• •	4.3	. 4.7	

5.14 Metro Audience Trends Page

Footnote Symbols: ** Station(s) not reported this survey
+ Station(s) reported with different call letters in prior surveys - see Page 5B.

Arbitron Ratings Co., used with permission.

performance in the market from the Metro Audience Trends section.

Consider as an example the Monday to Sunday 6 A.M. to midnight section in 5.14. It shows that from spring 2004 to spring 2005, WCCC clearly led the market and continued to have climbing shares and cume ratings (cumulative audience) in the last book. WBBB was the number-two station and had an upwardly trending cume. WDDD was at the bottom of the market with flat ratings. WAAA's 12+ share declined from 3.3 to 2.6, but the drop is less than a full ratings point, and the station's cumulative rating remained at 10 percent of the market (near the bottom of the hypothetical market). Up-and-down data tell a program director that the music probably needs some fine-tuning in the Monday to Sunday 6 A.M. to midnight slot. WAAA's programmer needs to examine additional pages in the book, however, before making any major decisions.

Demographic Breakouts

Pages from Arbitron's Specific Audience (see 5.15) and Listening Locations (see 5.16) sections illustrate different ways to display ratings and share data serving different purposes. Metro and TSA AQH ratings

for several 10-year age groups broken out by gender (and Men 181 and Women 181), with Persons 12+ and Teens 12 to 17 listed separately, are presented in 5.14. In 5.15, Metro AQH population estimates are detailed for the three different places people hear radio (At Home, In-Car and Other) for drivetime and three other time periods. These data are reported separately for Persons 12+, Men 18+ and Women 18+ (5.13 shows only Men 18+). These Specific Audience and Listening Locations data help programmers see which dayparts draw which audience subgroups and where listeners most use the station. In combination with other information provided in an Arbitron book, they suggest how different programming (or additional promotion) can improve audience composition (and therefore salability).

Arbitron also reports an hour-by-hour analysis that includes ten demographic groups by AQH for the Metro area. A programmer can track a station's performance hour-by-hour from 5 A.M. to 1 A.M. to isolate particularly strong or weak hours during the broadcast day. Other sections of the Arbitron radio book include Exclusive Audience and Cume Duplication, both of which help radio programmers understand how listeners use radio.

5.15 Specific Audience Page

						AQH	(00)						
Persons 12+	Men 18+	Men 18-24	Men 25-34	Men 35-44	Men 45-54	Men 55-64	Wamen 18+	Women 18-24	Women 25-34	Women 35-44	Women 45-54	Women 55-64	Teens 12-17
174 186	55 55	6 6	15 15	21 21	B 6		112	28 39	35 35	30 31	6 6	12 12	7 7
322 370	142 167	1.8 1.8	68 78	43 56	1	6	177 200	39 42	69 87	41 42	13 13	9	3 3
6 3 5 6 6 7	269 281	12 12	23	36 36	47 53	5 9 60	366 385	22 22	19 27	51 51	4 4 4 6	88 95	1
135 135	55 : 55	9	: 6 B	1 B 1 B	4	8	69 69	5 5	11	19 19	. 7	13 13	11 11

Footnote Symbols:

- Audience estimates adjusted for actual broadcast schedule.
 Station(s) reported with different call letters in prior surveys see Page 58

Arbitron Ratings Co., used with permission.

Listening Locations Page

į	MONDAY- FRIDAY COMBINED DRIVE			MONDAY - FRIDAY 10AM - 3PM			WEEKEND 10AM - 7PM			MONDAY - SUNDAY 6AM - MID		
	At Home	In - Car	Other	At Hame	In - Car	Other	At Home	In - Car :	Other	At Home	In - Car	Other
	18	26	13	9	27	21	12	8	6	14	TĖ	11
	31 36	46 43	23 57	16	47	37	46	31	23	33	42	25
1	26	32	42	27 18	31 21	92 61	25 42	17 28	18 30	30	27 27	43 43
1	129	49	77	122	33	140	118	29	14	114	34	56
1	51	19	30	41	11	48	73	18	9	56	17	27
1	29	26	7	19	22	6	3.5	10	4	24	17	5
-	47	42	1.1	40	4.7	13	61	2B	11	52	37	1.1

Footnote Symbols:

- Audience estimates adjusted for actual broadcast schedule.
- Station(s) reported with different call letters in prior surveys see Page 5B.

Arbitron Ratings Co., used with permission.

Arbitron radio data also come on diskette or online in a format called Arbitrend, which reflects the continuously measured markets and contains demographics. Programmers for music radio stations can also purchase (or write) software to accomplish most of the tedious work involved in developing a station's music playlist. (See Chapter 11 on creating music wheels.) One widely used software program on the market accounts for 50 different characteristics of a song when selecting its position and rotation!

Time-Spent-Listening

Programmers are rarely content with the bare facts reported by Arbitron (or Nielsen in the case of television), so they use all these various ratings to make many different computations. For example, radio programmers generally want to know how long their audience listens to their station. Timespent-listening (TSL) is computed by multiplying the number of quarter hours in a daypart times the rating and dividing by the cumulative audience.

To illustrate, assume we have the Los Angeles *Radio Market Report* and want to compute the 18+ TSL for KABC-AM. We can pull the AQH and cume from the book to produce the TSL. The TSL for adults 18+ for this station, Monday to Sunday, 6 A.M. to midnight, is calculated using the following formula:

$$TSL = \frac{AQH \text{ in Time Period} \times AQH \text{ Audience}}{Cume \text{ Audience}}$$

$$AQH \text{ in Time Period} = 504*$$

$$AQH \text{ Audience} = 872 (00)**$$

$$Cume \text{ Audience} = 9,875 (00)$$

$$TSL = \frac{504 \times 872}{9,875} = 39.9$$

**Zeros indicate that these numbers are in thousands, for example, 872 means 87,200.

Therefore, the programmer concludes that the average length of listening to KABC for an adult 18+ is 39.9 quarter hours during a given week, 6 A.M. to midnight. A high TSL indicates that people (who listen) are listening for long periods of time, not that a lot of listening goes on. TSL refers only to the amount of listening by those who do listen. Television programmers also calculate time-spent-viewing using the same formula.

Turnover

Turnover indexes the rate at which an audience changes, or turns over, during a time period. Turnover is calculated by dividing the cumulative audience by a quarter-hour rating:

$$Turnover = \frac{Cume\ Households\ or\ Persons}{AQH\ Households\ or\ Persons}$$

A low turnover rate indicates a loyal audience, and high turnover means a station lacks "holding

power." Television stations expect more turnover than radio stations and go after greater reach. Turnover is calculated for public broadcasting and cable as well as for commercial radio and television. Tracking the amount of turnover on a graph over time provides a quick clue to changes in audience listening or viewing patterns for an individual station or service.

Cable Ratings

Nielsen reports cable network ratings data separate from broadcast network data for the larger basic and premium cable services (in addition to cumulative totals for all basic and pay networks within the *Pocketpiece* and *NSI Reports*). More than 90 percent of Nielsen's 10,000 people-meter sample are cable or satellite subscribers, and Nielsen issues its *Cable National Audience Demographics Report* covering the national audiences for the largest services drawn from people-meter data.

In general, the introduction of people meters has benefited cable services far more than most broadcast stations or their networks. In those 50 or so local markets measured with paper diaries, viewers tend to fill in diaries at the week's end, losing track of where VCR or DVD recordings came from and forgetting the names of the many cable networks, so the more familiar-sounding networks tend to get undeserved diary entries and consequently high ratings. Digital service adds a hundred or more to the usual list, only exacerbating this problem. People meters, however, record the exact channel viewed, the length of viewing (which is also recorded by traditional passive meters), and the composition of the audience. Many smaller local markets, however, continue to be measured with diaries or diaries plus passive meters.

On the local market level, individual cable networks are included in Nielsen's *Cable Activity Report* when they achieve a 3 percent share of audience (and pay the cost of data analysis and reporting). Nielsen measures cable service audiences along with broadcast station audiences in the all-market

^{*}There are 504 quarter hours from 6 A.M. to midnight, Mon.-Sun.

sweeps (using diaries or meters or both). Cable lineups differ from franchise to franchise within one market, however, and accurate tracking of channel attributions ("I watched Channel 3") has been difficult. For example, the Washington, D.C., area has about 30 cable franchises plus ATT's FiOS and DISH and DirecTV, which place the dozens of cable networks (and some broadcast TV stations) on widely differing channel numbers.

Moreover, digital cable lineups can locate the same channel in two or three places (say, 24 and 316 and 1627, with no apparent numbering logic). In consequence, ratings for the smaller services have not been stable even within a single market, let alone nationally (see Chapter 9 on the dream of uniform channel lineups). Even though the Nielsen metered markets (covering more than 60 percent of all U.S. viewing) may eventually migrate to Active/Passive people meters (A/P) or portable people meters (PPM) that read codes embedded in the programs by the producers, there will always be less reliable diary measurements in the smaller markets.

To qualify for inclusion in the standard television sweep reports, a cable service must reach 20 percent of net weekly circulation. In other words, 20 percent of the market's television households must view it for at least five minutes during the survey week. In the first year of reporting (in the dinosaur age of 1982), only HBO, WTBS-TV (the former Superstation, now the TBS cable network), Showtime and ESPN qualified. Two decades later, however, nearly all of the top 20 cable networks qualified in most markets, including (order varies somewhat from year to year) Discovery, ESPN, CNN, USA Network, TNT, Lifetime, the Weather Channel, ESPN2, Nickelodeon, Spike TV, A&E, TBS, the Learning Channel, CNN Headline News, MTV, Home & Garden Television (HGTV), C-SPAN, ABC Family Channel, the History Channel and Cartoon Network, each of which reaches over 90 million subscribers (see Chapter 9). Galavisión qualifies where Hispanic viewers make up much of the population, and other cable services such as WGN and WWOR easily qualify in some regions of the country. Cable networks appearing on only some of a market's systems, however, have more

difficulty meeting the minimum viewing level, even when they are regularly watched by the cable subscribers able to receive them.

Although each large cable system operator and network purchases cable ratings from Nielsen, they are also interested in research that identifies their most likely customers. Now a subsidiary of Nielsen, Claritas offers detailed demographic and behavioral information in annual reports. Nielsen's PRIZM (Potential Rating in Zipped Markets) report combines ZIP code information with Nielsen data, information from local governments, magazine subscription lists, automobile registrations, and other data sources. Such *geodemographic* information creates groups of population segments by lifestyle.

Arbitron competes with Nielsen on the cable front, using two techniques: Set-Top Solutions (STS) and the PPM mentioned earlier. STS collects viewer information directly from the cable converter box or DVR. The portable meters collect information from a pager-sized device carried by the viewer. Arbitron also offers three services to cable operators and networks: Scarborough, RetailDirect and Retail-Direct Lite. These services provide qualitative media and market consumer behavior information, but not ratings.

Premium Services

Pay-movie services have special measurement problems, of course (change any tech and "problems" rise up). Movies, the largest element in their programming, appear in repeating and rotating patterns to attract large cumulative audiences for each feature. This contrasts with the broadcast television pattern of scheduling a movie or series episode only once in prime time (typically) and seeking the largest possible audience for that one showing.

In digital households, subscribers may have six channels of HBO, six channels of Starz, eight channels of Encore, seven channels of various ESPNs, plus additional multichannel versions of the same networks in high definition. Even TNT appears in three places: analog, digital and HD; thus, counting and matching viewing from system to system has nearly insurmountable difficulties. In addition,

six channels of ESPN Sports Pay-Per-View in digital and the same six again in HD appear on one cable system. And there are several on-demand channels on which older programs and events can be pulled up, for a fee. (These kinds of pay channels are measured by their buy rates, not household ratings.)

Indeed, viewers shift the times they watch pay cable so much more than they do broadcast television (by recording movies at home) that it becomes problematic to use the same measurement criteria. (See Chapters 3 and 9 on program evaluation and audience measurement.) Moreover, the total number of pay households is relatively small for all services except HBO, although nearly half of all television households take one or more pay services, in addition to digital service. And the large number of basic and pay-cable television networks subdivide the ratings into slivers much as radio stations do in major markets. Premium-channel cable programmers use the ratings information available to them to judge individual program popularity and channel popularity, but as yet pay networks rarely win specific time periods in competition with broadcasters. Frequently, however, the cumulative audiences for all showings of a top-notch movie on HBO equal the size of a television network's audience. Although pay-cable movies usually draw small audiences, original programming like Game of Thrones attracts critical acclaim, Emmy awards and stronger viewing levels.

Nielsen publishes a quarterly Cross-Platform Video Report and a comprehensive Video Recorder Usage Study, which can help pay-cable programmers make sense of reported viewing. The Nielsen Homevideo Index, as contrasted with the Nielsen Station Index, provides many additional specialized reports for cable programmers.

Rentrak specializes in measuring video-ondemand, which is becoming more important as portable video devices (such as iPads and tablets) reach greater acceptance with viewers. Mobile OnDemand is Rentrak's answer to measuring cellphone viewing and other portable use of media. Nielsen still struggles expanding its home-based measurement to portable devices, but competition from Rentrak and comScore will likely result in new products to keep Nielsen competitive in the future.

Cable Penetration Measures

Using figures supplied by Nielsen and the industry itself, the industry regularly updates cable statistics, reporting how many households have access to cable at the present time; such households are called homes passed (HP). As of 2012, more than 99 percent of U.S. households were passed by cable wires; that is, people in virtually all homes and apartments could subscribe to cable if they wanted to. Cable penetration is the percentage of television households actually subscribing to basic cable service (shown as household penetration in 5.17), which has held steady at about 61 percent. Actually, the total penetration by the cable *networks* had neared 91 percent by 2012, thanks to other multichannel distributors and the conversion to all-digital television.

Another important figure to the industry is pay as a percentage of basic cable subscribers because those are the homes actually signing up. NCTA no longer reports premium subscribers, but a good estimate is three-quarters of basic cable subscribers take one or more pay channels. It is estimated that, in addition to 70 million subscribers to cable systems. about 36 million households subscribe to DirecTV, DISH or other kinds of services, such as wireless cable, home satellite dishes in their yards or telephone companies. Giants like AT&T's FiOS provide the same cable networks to private homes and offices, but their penetration is, so far, a tiny percentage.

Like radio, cable, satellite and telephone services are also concerned with audience turnover. In cable, churn is the ratio of disconnecting subscribers to newly connecting cable subscribers (the number of disconnects divided by the number of new

2011 Cable Summary Report* 5.17

Total Subscribers 70,296,000 (based on 60.6% of 116 million TV homes) Homes Passed 128,500,000 Total Cable Systems 7,426 Household Penetration 60.6%

^{*}www.ncta.com (Statistics), estimated, 2011.

connects). The problems associated with a high rate of churn are described in Chapter 9.

Because the audiences for many advertisersupported networks are too small (at any one time) to show in Nielsen ratings books, a number of smaller basic cable networks estimate their audiences on the basis of customized research that adjusts the size of the universe of homes to match cable penetration in the markets the cable network already reaches. Many cable networks reach only a portion of cable households, and of course, the audience for any one channel at any one time can be minute. Direct comparisons of such customized cable ratings to ordinary ratings can lead to confusion because nonsubscribers are not counted. Especially for narrowly targeted cable services, advertisers want detailed demographic breakouts, which necessitate expensive customized cable research at the local level.

Online Research Services

Because of interrelationships among internet websites and the traditional media of cable, satellite, telephone and broadcasting, it is not surprising that Nielsen rapidly developed a system for measuring internet audiences. Nielsen//NetRatings is one of two major competitors in this field, the other being Media Metrix, the web's oldest rating service. Both use samples of home and at-work web surfers to monitor and estimate usage patterns.

Although cable, satellite and telephone delivery of television have certainly had a huge impact on audience behaviors, this impact pales in comparison to the profound and sweeping effects of the internet on television, as well as lots of other things, and it is still in the early stages of its development. How and why people use the web, what they use it for, and how these things affect other traditional or "old" media are yet evolving, but some trends can be gauged with fairly high accuracy (although others remain highly speculative). The situation for web audiences is extremely dynamic, almost volatile in many respects. Chapter 4 discusses in detail what online ratings show about audience behavior. One example is the measurement of time-spent-online (TSO), which by 2010 was 18 hours a week per adult, on average, and creeping up toward the 31.5 hours spent watching television weekly.8 The methods and terminology used for measurement of online computer use are quite different from those used for broadcast and multichannel measurement.

Web Tracking Services

Nielsen//NetRatings publishes regular reports that include five sections: Audience Summary, Audience Profile, Daily/Hourly Traffic, Average Usage and AOL Audience Report. Audience Summary reports give a comprehensive profile of the entire web audience, including the unique audience (average number of different people who visit a site on each day during the course of the month), page views, audience demographics, frequency and time-spent information.

Audience Profile shows demographics for the total U.S. internet population. This report shows audience composition, number of sessions per period, average time spent per session and average pages viewed per session. Daily/Hourly Traffic breaks down the Audience Profile data by specific day and hour. Average Usage includes statistics on the number of sessions, pages viewed, pages visited per session, time spent per session and duration of the viewing of a page. AOL Audience Report shows average time spent and audience demographics for use within the AOL service.

The Nielsen//NetRatings audience-tracking software has several advantages over other approaches because of its accuracy. The software "sits in the datastream" and provides an unobstructed log of all web activity. This unique technique for tracking users automatically measures the viewing and clicking of ad banners (bannertrack), e-commerce activity (commercetrack), page views cached (that is, stored) by the browser program (cachetrack) and page loading times. The tracking is unobtrusive to users in order to limit bias and requires the absolute minimum in company intervention once installed. Software updates are also wholly automatic.

Nielsen has also begun to measure web-enabled television sets. Viewers who use such receivers to browse websites and stream web programs will be measured alongside their more traditional program choices. Nielsen also adapts its STB devices to collect viewing data for homes connected to FiOS, which is AT&T's answer to broadband distribution of webbased programs.

The other leading web tracking service, com-Score's Media Metrix, produces a variety of reports from the continuous monitoring of internet audience behavior. The comScore company surveys 120,000 internet users recruited though random-digit dialing. Media Metrix also offers in-depth tracking of online transactions, at-work usage and activity on all web networks. The detailed description of the Metrix process illustrates the complexity of the problems and the seemingly arbitrary nature of some decisions that must be made to have a workable measurement system for online usage (see 5.18).

Rentrak also offers measurement of web program viewing through its Internet TV Essentials product. This service gauges how, what, where and why online television viewing takes place. Rentrak attempts to measure the shelf life of video content to help clients optimize their libraries of web programs. Two types of viewing are considered: livestreaming and per-transaction downloads, for either purchased content or rental showings.

5.18 The Media Metrix Method

sing its own patented metering methodology, Media Metrix continuously captures actual usage data from randomly recruited users, getting representative samples of tens of thousands of people in homes and businesses around the world (but excluding college labs, cyber cafes, airports, hotel business centers, public libraries and K-12 schools where there are certainly lots of computers ...). The Metrix is a software application that works with one's PC operating system to passively track all user activity in real time-click by click, page by page and minute by minute, measuring only those users who visit the internet at least one day per month.

The unduplicated audience (cume or reach) is calculated by adding all at-home users to all at-work users and then subtracting all users who use both locations. Only the base-page universal resource locator (URL), or page address, is counted, even if other files and items are associated with it

By recording whatever keyboard or mouse activity is taking place, Media Metrix keeps track of each time the computer is turned on or off, when the machine is on, and whether a user is actively using the machine. Sixty seconds after keyboard or mouse activity ceases, the machine is declared to be "idle." Viewing time is not credited when the machine is in the idle state, but as soon as a user moves the mouse or presses a key, the meter resumes accumulating viewing credit to the page or application.

When the computer first boots up, the user must select his or her name from the list of registered users and press OK. After 30 minutes of "idle" time, the meter presents its

user identification screen again to ensure that a change in user is captured. If at any time the user changes, it is a simple matter of clicking the meter's icon to recall the user identification screen. The meter applies viewing credit to only one application or program at a time. If, for example, the user is using a word-processing application while his or her browser is in the background downloading web pages, the word-processing application receives viewing credit—not the browser

Whenever a page from the web is displayed in a browser, the meter records the full URL. The Media Metrix Meter records the name and details of each file coming into the PC over a network connection. The meter also records information about each graphic file, banner ad, sound file (way, mid, mp3), streaming media and so on. The meter also can record additional detail on demand, such as specific activity within applications.

Once or twice per year, a certain percentage of respondents are asked to complete qualitative questionnaires to more fully describe their lifestyles beyond the key demographic data. Household-level demographics are updated annually by asking a representative from the household to visit a website and update the profile. Additionally, twice per year, a portion of the sample is provided with "scanning" software, which scans the PC to record the technical configuration and to log which software programs are installed. The weakness of the Media Metrix method is that it favors heavy web users and excludes light users (many of whom may be fearful of viruses and worms or wary of providing fodder for commercial advertising messages).

In addition to Nielsen//NetRatings, comScore Media Metrix and Rentrak, other services "audit" server-based information supplied by websites. I/Pro offers its I/Audit service, and Audit Bureau of Circulation (the same ABC that audits newspaper and magazine circulation) provides a service called the ABC Interactive Web Site Activity Audit Report. All these measurement systems have strengths and weaknesses that favor some sites and some kinds of usage over others. You'll be rolling in gold if you're the one who comes up with the technology that advertisers like, is fairest to all users and is most widely adopted.

Online Ratings Terminology

Page views (also known as page impressions) are usually defined as one or more online files presented to a viewer as a single document as a result of a single request received by the server. Visits are a series of interactions with a site by a visitor—without 30 consecutive minutes of inactivity.

Companies that focus on advertising measurement, such as ABC Interactive Audits, are concerned with such variables as ad display, ad download, ad impression, ad impressions ratio, ad request and click/ad interaction. To date, banners have been one of the most successful internet advertising methods, but for programmers, it is important to understand that advertising banners are not separate from the "program" content; they are somewhat like having a changing billboard in a live sporting event. Online, there is no flow, no break, and no need to zip or zap, although plenty of ad messages encourage the user to click away. The key measurement in e-commerce is the *click-through*, defined as the result of clicking on an advertisement that links to the advertiser's website or another page within the website (exclusive of nonqualifying activity and internal users).

As you would guess, different web tracking services use slightly different terminology. Media Metrix estimates a site's (1) *unique visitors* (the number of different people visiting the property in a 30-day period); (2) *reach* (percentage of projected individuals who visited a designated website or

category among the total number of projected individuals using the World Wide Web during a given reporting period); (3) average usage days per user; (4) average unique pages per user per day and month; and (5) average minutes spent per person per page, per day and per month. As explained in 5.18, Media Metrix's measure of unique pages counts the number of different URLs visited by a person on a particular day. For example, a user viewing a stock-price page who hits the refresh button repeatedly throughout the day will be counted as visiting a single unique page for the day.

Nielsen//NetRatings has similar terminology, covering three critical areas: *site activity* (sites visited, URLs within a site visited, duration of visits and duration and frequency of sessions), *advertising activity* (actual ad banners viewed, advertisers, sites the ads ran on and ads clicked on), and *user profile* (age, gender, marital status, education, occupation, income and ethnicity). Of all these measures, programmers are most interested in *unique visitors* and *reach*, because they are most like broadcasting and cable audience measurements, and also perhaps *site activity* as an assessment of content popularity.

Matching

Attempts to combine the traditional media content of print or TV and related internet sites first occurred when NBC collaborated with Digital-Convergence.com to allow viewers to link their personal computers with television programming and advertising during NBC's 2000 Olympics, its national election coverage and its fall 2000 network television season. Advertisers could then track consumers interested in their products and tailor online information accordingly. The system enabled advertisers to communicate directly with these potential customers and not waste resources on those consumers for whom the brand is either irrelevant or not the preferred one. Whether the potential customers thought it was such a good idea is an open question.

All television networks continue to look for ways to "involve" the television and web audiences. TruTV argues that *cost per involvement (CPI)* is a key measure of return on investment for advertisers who fund programming. Originally, truTV (back

when it was Court TV) introduced its "lean forward" campaign, noting that viewing TV while connected to the internet was different than the old "lean back" model of passive viewing. Now, the channel uses custom analysis of Nielsen data to assess the "stickiness" of its website for program viewers. It did, however, stop short of measuring the direct effects of product sales because, like most other advertiser-supported channels, truTV felt it could not be accountable for the creativity of the advertising message.

More recently, the issue has become *click fraud*, or concern for the accuracy of click counts. To the industry's dismay, two quite different kinds of fraud have been detected. In one case, a group of people flood a site with clicks in order to earn money (hosts of search ads make money according to how many people access the ad, and an extra-large number of clicks earns more money—enough to pay off conspirators). In the other case, companies with display ads normally pay to stay up on the site only until they attract a certain number of clicks, and then excess clicks can knock the ad off early (an advantage to a competitor).

Beyond this purposeful deception, measurement definition is an issue. For example, is a person two unique visitors or one if he/she accesses the same site from home and work on the same day? Eventually, the Media Rating Council is expected to establish uniform definitions for valid, invalid and fraudulent clicks, as well as standards for auditing tracking numbers (as soon as a million companies can agree on them).

Ratings Limitations

Although many broadcast, cable and web programmers are aware of the limitations of ratings and user counts, in practice these limitations are rarely considered. This does not result from ignorance or carelessness so much as from the pressure to do daily business using some vardstick. Programmers, program syndicators, sales staffs, station reps and advertising agencies all deal with the same numbers. In any one broadcast market, all participants—those buying and selling programs, those selling and buying time—refer to the same sets of numbers (Nielsen reports in TV, Arbitron in radio), and they have done so for decades. The "numbers" for any single market usually show a consistent pattern that makes sense in general to those who know local history (such as changes in power, formats and ownership). Although broadcasters and the ratings companies know that the "numbers" are imperfect, they remain the industry standard. In practice the numbers are perceived as "facts," not estimates, like it or not.

Occasionally a gross error will require a ratings company to reissue a book, but for the most part, small statistical inequities are simply overlooked. To eliminate as much error as possible and refine methods suited to the newer media, the major ratings companies use advisory boards that suggest how to improve the ratings estimates. Because a change in ratings methodology always means additional costs passed on to broadcasters, the rate of improvement will continue to be conservative now that the shift to people meters has been accomplished.

The major limitations of broadcast and cable ratings are briefly summarized as follows. Until use of the internet as an advertising medium grows considerably, the problem of limited use overwhelms all other methodological considerations, and advertisers are the ones who pay for ratings research. But it won't be long. Advertising on Facebook, in particular, has had a monumental effect on advertisers' perspectives. All those hundreds of thousands and millions of eyeballs...Nonetheless, the following seven practical and theoretical problems limit the validity, reliability, significance and generalizability of broadcast and cable ratings data.

1. Sample Size

Although each ratings company attempts to reach a sample that represents the population distribution geographically (by age, sex, income and so on), a shortfall occasionally occurs in a market. Such shortfalls are in fact routine in radio market ratings and also occur, although less frequently, in television market ratings. In these instances, certain demographic groups have to be weighted to adjust for the lack of people in the sample (such as too few men between 25 and 49).

Weighting by large amounts makes the estimates less reliable. The amount of unreliability is related to the (unknown) differences in responses between those who did respond in the sample and those who did not cooperate or bother to comply with all of the procedures. An expected return rate of 100 diaries from teenagers, for example, with an actual return rate of 20, should create strong skepticism about how representative the 20 responders are. The 80 who did not respond would undoubtedly represent this segment of the audience better and more accurately, but because their media usage is not known, the ratings services

use the 20 responses and compound the error by assigning a weight of 5 to each of the 20 responses (to calculate the number of respondents in this age group as a proportional part of the total sample). Although weighting is a scientifically acceptable and perfectly valid procedure, it assumes that those responses being weighted closely represent those responses that are missing (see 5.19 for more on sampling errors). In our hypothetical example, the responses of too few individuals represent too many other people/households.

Sample size is the one limitation that comes to most people's minds when they hear about how ratings are compiled. The typical "person on the street"

5.19 Standard Error

The concept of standard error is not a ratings limitation but rather part of a mathematical model whose use reduces some of the problems associated with rating procedures. In practice, however, very few people using audience ratings ever take standard error into consideration. The "numbers" are seen as factual; sampling errors and other errors or weaknesses in research methodology are not considered in any way.

In essence, using the standard error model compensates for the fact that ratings are produced from a sample of people, not a complete count of an entire population. Whenever researchers project sample findings into the general population from which that sample was drawn, some error necessarily occurs. A standard error figure establishes the range around a given estimate within which the actual number probably falls. The range suggests how high or how low the actual number may be. The formula for standard error is

$$SE = \sqrt{\frac{p(100 - p)}{p}}$$

where SE = Standard error

p = audience estimate expressed as a ratio

n = sample size

For example, suppose that a random sample of 1,200 people produces a rating of 20. The standard

error associated with this rating is computed as follows:

$$SE = \sqrt{\frac{20(100 - 20)}{1,200}}$$
$$= \sqrt{\frac{20(80)}{1,200}}$$
$$= \sqrt{1.33}$$
$$= 1.15$$

A rating of 20 therefore has a standard error of plus or minus 1.15 points—meaning that the actual rating could be anywhere from a low of 18.85 to a high of 21.15.

Another difficulty in calculating error is determining how confident we want to be of the results. It is possible to be very confident (with a 95 percent probability of being right) or somewhat confident (with only a 65 percent probability of being right). Nielsen ratings are generally calculated to the lesser standard. Most social science research uses the higher standard. Nielsen includes standard error formulas in all their ratings books for those wishing to calculate error in specific ratings and shares, but undeniably, printing the range for each rating/share would make ratings books unusable. Nonetheless, the range is the most accurate version of each rating or share, given its database, which may itself introduce a great deal more error.

response is "How can a few thousand people be used to measure what millions of people watch or listen to?" They are mistaken; the sample sizes used by the ratings companies are not the major problem. The representativeness of those selected for the sample is.

2. Lack of Representation

The major ratings companies long refused to sample from group living quarters such as college dormitories, bars, hotels, motels, hospitals, nursing homes, military barracks and so on. The problem with measuring such viewing is that the number of individuals who are viewing varies, sometimes greatly, making it nearly impossible to determine how many diaries or people-meter buttons need to be provided. The Nielsen people-meter ratings also fail to measure the number of people viewing in offices, workplaces, and country clubs-or who are watching batteryoperated TV sets on beaches and at sporting events (there are more than 10 million portable TV sets in the United States, to say nothing of watching via computers, tablets or iPhones).

In the latest Total-TV Audience Monitor (T-TAM), a national survey, Nielsen Media Research estimated that about 44 million adults (and 32 percent of adults aged 18 to 49) watched television in out-of-home locations each week. As a result, Nielsen finally began including college students living away from home in its ratings because the survey showed that college apartments and residence halls were among the most common outof-home locations for TV viewing. Nonetheless, only students whose families already participate in Nielsen's surveys can be included—so they do not represent new, independent families-but at least dorm, fraternity, sorority and off-campus apartment viewing now can influence ratings.

The rest of out-of-home viewing, however, only appears in special reports, not the weekly ratings. Nielsen argues that such viewing accounts for only a small percentage of total national television viewing and is therefore not worth pursuing (that is, is not cost-effective for broadcasters to pay to measure). Critics argue that, given that the number of TV households in America is 116.2 million, with 2.56 bodies per household, totally 297.2 million

people, the loss of 44 million more out-of-house (OOH) viewers is very much affecting program ratings, and that other OOH viewers need to be added.

TV programs and some radio formats that appeal to narrow demographic segments are widely known to go uncounted in calculating the ratings. Estimates for Late Night with Jimmy Fallon indicate that as much as one-fifth of the actual audience used to go uncounted by Nielsen's ratings largely because of the exclusion of the types of locations where many people watched the program (college dorms and bars). The same was true (and may still be to some extent) of Fallon's predecessor, Late Night with Conan O'Brien, and its competitor, The Late Show with David Letterman.

Also, cable sports services such as ESPN, watched in nearly every bar in the country, suffer from the omission of group audiences. At least 59 percent of ESPN's 5.4 million adult viewers watch outside the home each week. The wide popularity of sports bars in recent years (with multiple TV screens and patrons switching among different channels of ESPN) adds substantially to the inaccuracy of samples used to measure sports viewing. Group viewing of soap operas is another unmeasured phenomenon.

3. Ethnic Representation

Data for ethnic groups are among the most hotly debated aspects of broadcast and cable audience estimates. Ratings companies have long grappled with the difficulty of getting randomly selected minority households to cooperate with the ratings company by filling out a diary or having a meter installed. Companies have offered higher honoraria for participating in order to gain a representative sample of both Hispanics/Latinos and African-Americans. Nonetheless, many minorities understandably remain apathetic to the needs of ratings companies, despite financial incentives.

Critics argue that those minorities who agree to go along with prescribed procedures are much more like white sample participants and are atypical of the ethnic group they are intended to represent. Thus, a participating black family may not be like the vast majority of black families in a given viewing area. Ethnic populations are undoubtedly undercounted,

and those who are counted are often unrepresentative of their ethnic groups. Because no standard of "truth" exists by which to compare samples to an entire ethnic group, ratings companies and advertising agencies inevitably use the numbers in front of them to make decisions.

Nielsen does identify African-American and Hispanic audiences in its local market rating reports, but the information in some markets is limited to penetration, counting their presence in the same table as multiset, cable and DVD homes. At the national level, however, Nielsen's monthly reports have an added 20 African-American demographic categories. In addition, primarily to serve Univision and Telemundo, Nielsen started its Nielsen Hispanic Television Index (NHTI) in 1992, but more recently, Hispanic viewers

of Spanish-language networks were folded into national people-meter ratings just like other television viewers. For markets with a significant Hispanic population, Nielsen has phased out it separate local ratings report for those homes (HSI) in favor of the NSI report.

In other countries, the enormous complexity of the racial and economic situation goes far beyond what U.S. ratings companies must deal with (see 5.20 on what is measured in South Africa). Everywhere, advertisers and media programmers need to know what languages their viewers or listeners prefer and what electronic capabilities their households have. In many developing countries, especially rural areas, viewing and even listening often takes place in large groups, which alters the relationship between a

5.20 Going Beyond Race

nce freed from apartheid, South Africa's volatile history of racial division and tension led its broadcasters and marketers to seek out ways to avoid categorizing people primarily by race in research. A Living Standards Measure (LSM) was developed that clustered people into ten distinctive segments on the basis of degree of urbanization, ownership of cars and major appliances, languages spoken, and access to basic services (water, electricity, telephones, media). Because LMS is a multivariate segmentation tool constructed from 29 variables, it is a far stronger differentiator than any single demographic variable. The full list includes such variables as the following:

Electricity Flush toilet in house or plot

Electric stove or hot plate Microwave oven Water in home or on plot Hot running water Traditional hut Built-in kitchen sink Washing machine Tumble dryer Refrigerator/freezer Deep freezer

Dishwasher No domestic worker

Sewina machine Vacuum cleaner or floor polisher

TV set VCR in household

Home telephone No cell phone in household Pay/satellite channels Stereo or music center

PC in home Fewer than two radio sets in home

One or more sedan cars Home security service

Home in Gauteng/Western Cape Home in nonurban area outside Gauteng/Western Cape

The LSM is widely used in both programming and advertising to define target markets. It is also used in customized formats in other parts of Africa, and efforts have begun to use LSM as a global marketing tool.

> Daan van Vuuren former Director of Audience Research SABC, South Africa

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program and its audience from a programming perspective and certainly makes counting viewers or listeners even more problematic.

4. Cooperation

All ratings companies use accurate and statistically correct sampling procedures: People/households are selected at random to represent (within a small margin of error) the population from which they were drawn. For representativeness to occur in practice, however, the people/households originally selected must cooperate when the ratings company invites their participation. In the past, when Nielsen used the passive TV-set meters (before people meters were developed), cooperation was not an overwhelming problem. Since the late 1980s, cooperation rates for allowing the installation of the more complicated people-meter technology by Nielsen have steadily declined to alarmingly low levels. Studies have reported refusal rates of one-half to two-thirds for people-meter installations among those contacted in original random samples. Refusal rates were highest among ethnic minorities and younger adult males.

The same studies also reported sharp declines in the area of diary cooperation. Nielsen diary response rates for the November sweeps went from about 43 percent in the early 1990s to around 28 percent by 2000. Arbitron diary response rates went from 40 percent in 1995 to 35 percent by 1999. Again, participation differs among key demographic and lifestyle groups. Ratings for children and teens are hugely problematic. Moreover, long-term cooperation from all viewers continues to be a problem. Using a diary requires participants' willingness to train themselves to fill it out as they view or listen and to learn how to fill it out correctly. People meters require pushing buttons every 15 minutes as onscreen reminders interrupt viewing. They also require the householder to assign spare buttons to casual guests.

Nielsen's reliance on diaries continues in nonmetered markets across the U.S. One of the authors of this chapter was selected to participate in the local market ratings one year ago and, again, this past year. Upon receipt of the diary and complete instructions, the author discovered that one of the first tasks was to list the TV channels regularly watched for each of the TV sets in the household. Since the author routinely "watches" more than 50 channels on a regular basis, sampling program offerings at various times of day or night, this was, at the very least an arduous task. The author felt like tearing pages out of the Time-Warner Channel Guide print publication and stapling them to the diary with the words "good luck" written on them. Moreover, the week selected for completing the diary was a totally atypical one in terms of outside commitments and events that would result in a completely unfair representation of a normal weekday/weekend viewing period. Suffice to say, the diary was not filled out and returned last year, despite follow-up reminders.

Not to be outdone, the Nielsen folks called again this past April, never leaving a message. Thinking that was the end of it, the author was then surprised to receive a diary and instructions for participation this year. Nothing had changed in terms of the process becoming more user friendly or more in line with how most people watch television. Again the diary was not returned, despite the usual follow-up reminders.

Based on the author's personal experience, it seems appropriate to ask how reliable the local market ratings were and will be, given poor cooperation rates to begin with and coupled with such a major piece of work to complete what was asked. The Nielsen folks would of course say that these were not usual circumstances, but coupled with other cooperation problems, the limitations of such procedures in a highly technological age seem obvious.

Another problem in gaining cooperation that has emerged in the last five years centers on having access to a representative sample to participate in the ratings (national or local market level). More and more households have no landline telephones ("cord cutters") and are not accessible through various household listing that could be used for the sample. Of those households with landline phones, many have caller ID and won't answer unfamiliar calls and/or have put their landline phones on do-not-call lists, which would make them unavailable to Nielsen.

Another way of collecting data, the telephone coincidental method—usually assumed to be the most reliable method—has its defects, too. A 2004 study conducted by Ball State University indicated that phone surveys are "largely useless" for determining media behavior. The three-part study combined phone surveys, diaries and observation with vastly different results: On average, people reported through phone surveys that they watched only 121 minutes of television per day. At the same time, diarists logged 278 minutes, and researchers observed individuals actually watching 319 minutes. Other results showed that phone survey responders said they spent only 29 minutes online per day, but diarists said they logged on for 57 minutes each day, while observations recorded people going online for 78 minutes a day.

Whenever cooperation rates are low, for whatever reason, the participating sample probably differs from those who declined. Those who cooperate typically demonstrate a highly favorable view of the medium and generally use it more often than those who refuse to cooperate. Refusals may indicate a lack of interest in the medium or, at the least, too light a use to warrant learning a fairly complicated but infrequently applied process. It is easy to visualize a single person or a young, childless couple who says to the ratings company, "No thanks, I'm (we're) almost never home. I (we) hardly ever watch TV at all." Thus, those who view more or use the medium more are probably overrepresented in the sample, resulting in correspondingly inflated viewing estimates and unrealistic measures of the total television audience's preferences. Of all the limitations on ratings, cooperation remains one of the two most significant and persistent problems.

5. Definition of Viewing/Listening/Visiting

And here's a head-scratcher: No one seems to be even remotely certain of precisely what it means to "view" television or "listen" to radio. It sounds so simple on the surface, but consider this: For those using people meters to be counted as "viewers," household members must activate the peoplemeter computer with the handheld device only while in the room where the television set is on. At regular intervals, viewers are reminded of the need to "log in" by pointing their handheld

device at the TV set. In all systems, the sole criterion for being a viewer is *being in the room*. Viewers can very easily be reading magazines, talking, thinking, playing a game—in short, paying little or no attention to the picture or sound—but are still counted as viewers.

Conversely, a viewer might be in a nearby room doing a menial task and listening intently to a program's sound. This person is normally not counted as a viewer. Being there may or may not constitute "viewing." More crucial, watching the same content via computer screen is not included as viewing. What the ratings services measure, therefore, are potential viewers—with the option of letting traditional television (or radio) receivers occupy their attention. To date, no commercial techniques measure viewing as a function of the attention paid to what is on or to the way that content is used. And viewing or listening via the new reception media appears only in special studies, not regular ratings.

Among radio audiences, the parallel problem is no uniform definition (or no definition at all) of what it means to "listen" to radio. When in someone else's car on the way to school or work while this person has the radio on, should the passenger be counted as a "listener" to station WXXX? How about offices where a radio station plays in the background while people work? Are they "listening"? Is the music or information what each person would have chosen had they been able to select the station? Moreover, what does "listening" mean? If a person is paying attention to other things and has the radio on for background noise or a kind of companionship, should that person "count" as a listener?

As for what it means to "visit" a website, the absence of universally agreed-upon definitions poses inherent interpretation problems when trying to understand what the numbers mean or represent. In this instance, the problem centers on defining what it means to "use" a website, a parallel to what it means to "view" television. To be counted as a site visitor, does one merely have to access the site to be counted or, perhaps more importantly, should that person count the same as someone who, while at the site, goes to other options or pages that are components of the site? Other questions that need to be answered

include "What exactly does someone look at when at the site?" "For how long does the user look at a particular item or the site generally?" "Why were none of the options accessed?" "Why were one or more options accessed?" "As difficult as it is to come up with a valid definition of what constitutes "viewing" television, it seems easy by comparison to defining what goes on with a user while he or she is at a website. The contemplate the strange things people do with smart phones ...

Both television and radio ratings are plagued by the industry's unwillingness to provide a standardized, widely agreed-upon definition of viewing and listening, and now the problem is extended to the online world. So long as the advertising industry remained satisfied with the ratings numbers generated for TV and radio, there was little reason for concern. As Nielsen moved to people meters, however, and as media choices proliferated rapidly through cable and satellite-delivered media services to the internet and mobile handheld media, the reported numbers for conventional media showed progressive shrinkage. Advertisers began to ask what was going on, and the broadcast and cable industries began to scramble for explanations. Broadcasting and cable have continued to point the finger of blame toward the ratings services, questioning their methods and the validity of the numbers they report. Lost in all the ongoing measurement arguments is the crux of the problem—no one knows what the ratings services are supposed to be measuring in the first place. This debate has no satisfactory means of resolution until basic definitions are standardized.

6. Station Tampering

A continuing problem for ratings is that sometimes stations attempt to influence the outcome of the ratings by running contests during the measurement period. Arbitron and Nielsen place warnings on the cover of their ratings books advising users of stations' questionable ethics. Of course, there is a gray area: Was the promotional activity (called *hyping* or *hypoing*) really a normal contest or one designed to boost (hypo) the ratings?

Warning labels are especially ineffective for the advertising industry when the agencies get their

numbers from computer tapes or online services. There is no "book" on which a warning can appear. The problem of hyping has grown in recent years, with some local newscasts promoting huge cash giveaways during sweeps. Many industry experts predict year-round measurement for television that abolishes sweeps periods will eventually solve the hyping problem.

7. Device Limitations

Not everyone has faith in the reliability of people meters. After 30 years of depending on one ratings system, Nielsen's abrupt change in 1987 from passive meters and diary-based national television ratings to people meters created an uproar. The shift happened all in one year, and, with so much at stake, many in the industry felt unprepared. One objection to people meters centers on what happens when the handheld devices are not correctly operated. When mistakes are made, as is inevitable, viewing is invalidated and not counted in the ratings. Given the high likelihood that people will have occasional mechanical difficulties and that children and teens will "fool around" with the meter, much legitimate viewing may be lost. Nielsen argues the necessity of omitting figures where the device was misused, claiming that such inclusions would produce unrealistic figures. Nielsen further claims that in a national sample of 12,000 households, occasional omissions have only a negligible impact on ratings. Not everyone agrees, however.

Another people-meter problem occurs with sample composition. The difficulties previously discussed concerning who chooses to become part of the sample and who refuses are worsened, not resolved, by people meters. Nielsen's own studies show that people-meter cooperators differ from noncooperators in that the former are younger, more urban and have smaller families (they may also differ in other unreported ways). Older people and those living in rural areas are underrepresented in the people-meter sample, in part because of many people's reluctance to learn to use "another new technology." It is, however, recognized that Nielsen's previous national sample

overrepresented older viewers and that the post-1987 sample composition more accurately represents the country's overall population.

A third limitation centers on a new form of resistance to allowing Nielsen to install the people-meter hardware. Installing the older passive meter involved little or no hassle for participants. People meters, however, require substantial amount of wiring and hole drilling. For many people, allowing workers into their homes to do such work is an intolerable intrusion. And, of course, if households allowing the installation do so in part because they are eager to be part of the television sample, they do not represent the overall population and probably produce inflated viewing estimates and distortions in program preferences.

A fourth and final device-related limitation occurs because people meters transform generally passive viewers into active viewers. Every time a participant enters the television room or leaves, the handheld device must be activated. Such behavior involves more conscious decisions to view, and about what to view and when to stop viewing, than does usual television behavior. Research shows that most viewing gets done with little self-awareness on the viewer's part. Now, viewers with people meters must actively record their behavior, and the results are probably atypical viewing. Nielsen maintains that peoplemeter users rapidly become accustomed to them, and "normal" viewing habits soon return, similar to the way viewers become accustomed to using remote controls.

Nonetheless, the many problems with sample, hardware, and the unnatural state of "active" viewing resulting from using handheld controls have prompted Nielsen to forge ahead with passive people meters. These are electronic devices equipped with infrared sensors that identify people present in the room and record that information along with the tuned program. While these passive people meters may overcome the "activity" criticism, testing shows that many people feel that the camera needed to record a person's presence in the room has spied on them. Nielsen and Arbitron have also been testing various kinds of portable people meters for many years, including a pager-sized PPM. (It has to be carried around or worn on the belt or wrist.) Until the technology of such ratings devices improves and is demonstrated as effective and appealing to audience participants in test samples, the problems inherent with the present system remain and pose major obstacles for interpreting what audiences are actually listening to or watching.

Whether a ratings system uses people meters, infrared sensors recording the presence of viewers in a room, diaries, household meters, portable devices or some vet-to-be-developed variation on these methods, ratings remain estimates of audience preferences, always subject to a certain undetermined margin of error (this margin may be quite small or very large; it is not known with any certainty). Previously, the media industry's temporary solution was to examine more than one set of numbers, but maturation of the industry has resulted in fewer independent sources of information about audiences (see 5.21, which discusses overreliance on Nielsen).

Moreover, considering numbers from multiple sources and multiple methods is a stopgap while awaiting a more valid measuring system. When all the numbers from different sources agree, certainly confidence in their accuracy rises. When there are variations, programmers and advertisers are left in the uncomfortable quandary of deciding which numbers to trust and which numbers to use. Some television programs and radio formats will not receive a completely fair rating regardless of which system is used—or even if a combination of measures is used. Children's and very light adult viewing will probably always remain uncertain.

Future Challenges

As the broadcast/cable and online/interactive worlds collide, we all expect big changes in the years to come. Traditional measurement services will certainly have to improve in order to measure smaller and smaller audiences with even greater accuracy. Google is set to challenge Nielsen with a

5.21 The Trap of Overreliance on Nielsen

ne serious manifestation of the broadcast and cable companies' continued reliance on Nielsen data as their major if not sole source of audience viewing data occurred in the fall of 2003 and remains a matter of considerable controversy with huge consequences for advertisers and media distributors alike. As the ratings numbers came in for the first month of the fall network prime-time season, sharp, statistically significant declines in young adult males appeared. Among males aged 18 to 34, Nielsen reported declines as high as 12 percent; among males gaed 18 to 24, the drop was 20 percent, For many advertisers who specifically buy programs that the network guarantees will have certain percentages of males in these age groups, this drastic reduction represented potential losses of millions of dollars in sales (and losses of millions in anticipated advertising revenue for the guaranteeing networks).

Network executives were quick to respond that Nielsen's sample was not representative of the total population of males aged 18 to 34 and that Nielsen's measurement methodology was responsible for the reported declines. Advertisers, by contrast, argued that such declines reflected a lack of interest on the part of young males in many network programs. Others pointed to the many activity choices that appeal more to young males than watching network television in prime time. Such choices include playing video games (for example, PlayStation II or Xbox) or computer

games, surfing the web, writing blogs and downloading and listening to music, as well as passively viewing DVDs and other prerecorded materials. Nielsen fiercely defended its numbers and methodologies, providing detailed explanations that supported four conclusions.

- Men aged 18 to 34 watched prime-time television with about the same frequency as in previous seasons, but they viewed for shorter periods of time; there are more days in which men in the key age group did not watch television at all.
- 2. Newly added sample members showed less decline in viewing than those continuing in the sample.
- A combination of incentives and "coaching" of sample participants was successful in overcoming the fatigue of button-pushing.
- Playing video games and watching DVDs did increase for men aged 18 to 24 years, but somewhat at the expense of DCR use.

It is clear that Nielsen numbers remain limited in their accuracy. While once the various parties were willing to overlook inaccuracies and agreed to accept ratings numbers as a common currency required for "doing business," the rise of competing media such as the internet and the threat of DVRs has generated a widespread challenge to traditional measurement practices.

media ratings system that links home computers wirelessly to television sets (and those ubiquitous boxes and DVRs). You can expect that electronic feedback on usage will be built into television sets, game players, smart phones, tablets and who knows what. This feedback will give advertisers near real-time and much more accurate measurement of media activity in general and commercial viewing in particular—whether you want it or not. The electronics that supply this information will be invisibly built into all your toys. So far, Nielsen is intent on acquiring smaller companies that use new devices that measure media activity and then folding the information into its existing, specialized reports.

At some time in not-so-far future, this type of real-time data collection could supplant Nielsen's people-meter ratings system, regardless of who owns and sells the data. Fortunately or not, technology to embed a "signature" into all forms of media content has been established, so the concept is out there. Devices that track audience behavior are likely to solve the counting problem—if only the issue of what is to be counted can be decided (with sufficient agreement among the parties concerned).

If DVRs make the practice of skipping commercials widespread, the future of advertising support for programming is also in question, leaving the likelihood of a pay-per-use system (on demand). Audience measurement is largely for the benefit of

advertisers. If the audience pays for individual programs or channels, will the ratings really matter? Restaurants don't live or die by the little response cards people fill out at the end of the meal! The price of the meals, the number of patrons and the potential return visits measure success. In a similar way, networks may become retailers of their wares, just as book publishers and motion picture studios are. In the meantime, branded products with the name of major companies proliferate in television programs. Everyone is looking ahead.

Social media like Facebook and Twitter have been widely credited with energizing audiences for films, products/services and television programs/ series. One objective is to engage viewers, turning them from indifferent, passive viewers into active, enthusiastic viewers who make specific programs a must-see on a weekly basis. Social media are also used to maintain interest in a series while it is on hiatus and especially as a new season approaches. Heightened anticipation is key to building interest and carrying it over to the start of a new season. Cable channels like TNT, USA and AMC are examples of cable nets that put a lot of effort into trying to fuel buzz for their series. Part of engagement is to get viewers talking (via the Internet social network sites) among themselves, sharing their thoughts on favorite characters, episodes, relationships, etc.

In an interview, CBS Marketing Group President George Schweitzer pointed out that "Technology is an enabler. It's enabling us to engage our viewers in the conversation—a two-way conversation where it used to be just one way." He went on to provide examples where CBS series' stars are often active on Twitter with regular tweets, interacting with viewers where all Twitter followers can read the exchanges and participate themselves. He also added that social media enable CBS TV shows to fuel word-of-mouth that is presumed to help build and maintain the series' audience.

The rub comes when searching for a connection between those programs that are successful in exploiting social media and generating conversations among many thousands of followers and the corresponding rating. Do those series with lots of social buzz show ratings increases over those with less buzz? What does it cost to continue active participation by the network in social networking? Will advertisers be willing to look beyond the cold numbers of ratings (overall and in key demographic areas) and be willing to pay more for the same numbers for a series that has ample evidence of an apparently energized and active audience? A survey in 2011 found that 40% of U.S. Internet users in the U.S. are fans or followers on Facebook and/or Twitter of at least one network TV show or network. 10 But, as CBS's Schweitzer concluded: "It's really hard to point to one specific thing, like Tweet Week, that affects ratings. From the amount of tweeting that there was, the responses we got and the thousands of new fans, we know that it [a show] was successful. But in terms of ratings, we'll never know."

Until there is a reliable means of measuring social network traffic's tie-in to the size of the audience (via ratings or other such measurement), networks will have to rely on persuasion to convince advertisers to pay more for those programs that are particularly effective in generating social network buzz. The biggest social media themselves could enhance their prominence among radio and TV stations and TV networks by producing some reliable indices of impact on audience size or higher levels of proactive consumer behavior for the advertised products and services. Calculating how many consumers use social network coupons or enhanced bar codes for specific products or services advertised on certain programs is one likely way of adding some more-or-less-solid numbers to the argument, but so far, privacy concerns seem to override such attempts.

Actual consumption, of course, speaks directly to advertisers' concerns. It is clear that social media are a growing source of online communication with incredible potential to alter the ways of doing business, but it is equally clear that much work—research, testing, public relations—needs to be accomplished by all parties with a vested interest in profiting from these new ways.

The latest challenge to the broadcast and cable industries comes from Nielsen's plan to introduce regular "commercial ratings" in addition to the usual program ratings. When specific commercials

have numerical audience estimates attached to them, advertisers will be able to evaluate the program contexts in which their commercial appear, and this information may have major consequences for programmers. It may influence the selection as well as scheduling of shows if the evidence is clear that some types are better suited for gaining audience attention to commercials, as is already believed. And how the media operate and are to be paid for are clearly not the only important questions relating to evolving forms of television, radio and information consumption that the public and government need to address. Other chapters in this book raise plenty of concerns about the media future.

Notes

- 1. The word *ratings* had a clear meaning for much of the history of broadcasting until the introduction of content ratings in the late 1990s. Content ratings serve as labels to adults who supervise children's viewing. As the motion picture industry did in the late 1960s, the television industry bowed to government pressure and began putting program content ratings on shows in the late 1990s. This chapter deals with ratings in the traditional sense of audience measurement, not content labeling.
- 2. Quantitative data come from audience diaries, meters on television receivers, and occasionally from one-time telephone measurements (called telephone coincidentals) during or immediately following a specific program.

- 3. For more on this topic, see Eastman, Susan Tyler, Ferguson, Douglas A., and Klein, Robert A. (eds.), *Media Promotion and Marketing*, 5th ed., Boston, MA: Focal Press, 2006.
- 4. Emily Steel, "New Tools for Picking Hits," *The Wall St Journal*, May 23, 2011, p. B4.
- 5. The number of households varies annually, and the number of people varies according to census reports. These estimates are from Nielsen Media Research.
- 6. More information about Nielsen is available on You-Tube by using "Nielsen Ratings 101" as a search term. The short videos are produced by Nielsen to reach potential panel members and clients. Each topic has its own video that breaks the research process into separate areas: introduction, designing the sample, recruitment, panel maintenance, and the future.
- 7. There are more radio markets (299) than television markets (210) because in big stretches of the southern and western United States there are places where no television reaches. In such places radio is useful and important. And stations and advertisers want those people counted.
- 8. Result comes from a meta-analysis (of multiple measurements) by eMarketer. http://emarketer.com/blog/index.php/time-spent-watching-tv-tops-internet/.
- 9. Interview published in the online source eMarketer (June 13, 2011 www.emarketer.com). http://www.emarketer.tv/Article.aspx?R=1008429.
- 10. Results released in the spring of 2011 from a survey by *The Wall St. Journal* and Harris Poll (press release, March 30, 2011). Wayne Friedman, "Social Media Increases Popularity For TV Viewer Comments," Media Daily News, http://www.mediapost.com/publications/? fa=Articles.showArticle&art_aid=147734.

6

Syndication for Stations, Cable, and Online

John von Soosten and Douglas A. Ferguson

Chapter Outline

The Syndication Chain

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hat you see on your hometown television stations usually comes from somewhere else, even though the local station gets the big billing! The programs can be network, advertiser supplied, local or syndicated. This chapter deals with the fourth type, syndicated programs, which are mostly reruns of TV series, specials and movies generally sold to individual stations or station groups for exclusive showing in a single market. These programs come from the distributor to the stations via satellite or Fire-Wire.² The local television station licenses a syndicated program from a syndicator, a national company that also licenses the same program to other stations in other markets but generally not to others in the same market, unless a second station is owned by the same group owner.

Have you run across listings for two different episodes of one show on different channels at different times in your guide channel? Under the FCC's cross-ownership rules, programs are frequently licensed to a group owner for airing on either of the co-owned stations in the same market. It is not uncommon for the same program to air on both stations, typically in different time slots, sometimes one right after another so you can watch double episodes. Just to keep you sharp, an alternative is that a given program may air for a period of months or even years on one station in a market and then be moved to the other co-owned station in that same market...and all run again.

Nationally, any "used television program" probably will not air simultaneously in the same time period in all markets and maybe not necessarily even on the same day or in the same daypart. The show probably will not air in every one of the 210 U.S. markets, and it probably will not air solely on affiliates of any single network. Hence, the program is said to be *syndicated*.

Although many programs may be licensed to national cable networks (which often precludes sale to local television stations) or online services like Netflix or Hulu, the term *syndication* typically applies to broadcasting. Although this chapter focuses on broadcast television, most of the principles and considerations discussed here apply equally to cable syndication, online syndication

and international syndication. The topic of radio syndication is discussed in Chapters 11 and 12 and noncommercial syndication in Chapter 10. The most common arrangements and methods of buying and evaluating syndicated programs are described in this chapter, but new permutations keep appearing. It is best to remember the old adage, "Just when you thought you'd seen it all..."

The Syndication Chain

The syndication chain reaches from the producer through various intermediaries to the station, and it begins with the program itself. By "program," we usually mean all the episodes of a series, anywhere from a handful to a hundred or more. Programs for syndication arise in one of four ways.

- 1. If the program was originally created exclusively for syndication and has not previously aired in any other venue (such as a network), it is said to be first-run; it is a program created for first-run syndication. Ellen, Entertainment Tonight and Judge Judy are easily-recognized examples of syndicated first-run programs. (Most new first run efforts are flops.) Foreign programs produced for airing in other countries and later placed into domestic U.S. syndication are usually considered first-run because they have not previously been seen in this country. (The rare program made for syndication that later gets sold to a cable or broadcast network—to the great joy of the producer—is called off-syndication.)
- 2. Programs that were originally created for one of the broadcast networks and are subsequently sold in syndication are called **off-network**. Previously aired episodes of *Family Guy*, *CSI: Miami*, *Everybody Loves Raymond* and *The Simpsons* are examples of off-network programs you've probably seen.
- 3. Shows that were created for the national cable networks were traditionally included in the offnetwork category. But as the number of such programs put into syndication increased, a separate offcable designation developed. Generally, these are

shows that go from one cable network to another (not to co-owned broadcast networks).

4. The fourth category consists of feature films, including theatricals (made originally for exhibition in movie theaters) and made-for-TV, made-for-cable or movie-of-the-week (MOW) films. MOWs may be off-network, off-cable or first-run in syndication.

You've surely noticed that while most network shows air once a week, syndicated shows are stripped across the week. Remember that there are (usually) 52 weeks with 365 days in a year (you learned this in elementary school), and television never goes dark (you learned this in middle school). If you (being now a grown-up station programmer or syndicator) subtract 52 weekends, you have 261 daily slots each year to fill with various stripped programs. Maybe there are a handful of holidays with special programs (Christmas) and local sporting events (Indy 500) and local political debates (every other year), leaving you with about 250 days to fill. If you buy a syndicated sitcom and run each episode twice, you need exactly 125 episodes to fill a half hour daily for the whole year... and 125 of the next show, and 125 of many others... TV eats up programs. Keeps programmers busy.

Off-network shows are sold for several of years with a fixed number of runs per episode. It takes a long time—at one episode per week—on a network to build up enough episodes for syndication. For example, five years of Two and a Half Men generated about 110 episodes that then might be sold for three or five years for five to ten airings of each episode. Of course, because they are reruns of reruns, off-network shows don't get network-level ratings when syndicated to stations (and if streaming rights to the same show have been sold to NetFlix or Hulu, then its value to stations sinks a bit further).

In contrast, *first-run programs* are generally sold in syndication for one or two years at a time with a predetermined number of weeks of original programs (most of them) and repeat programs (fewer). For example, a 52-week deal might include

39 weeks of original programs (195 shows) and 13 weeks of repeats (65 of the original 195 shows), getting the station through every one of the 260 weekdays for an entire year. If the program is successful, the contract may be renewed for a year or two, usually at a higher price. And fresh episodes of first-run shows are produced for each subsequent season. Look in 6.1 for examples of the four types of syndicated programs, and in 6.2 for syndicated shows categorized by program genre.

The person who is responsible for delivering the program on time and on or under budget is called the *showrunner*. He or she is directly accountable for contacts with the production company and syndicator who financed the program. Moreover, if a program is not delivering satisfactory ratings, the showrunner is responsible for "fixing" or improving it.

The syndication chain involves both direct participants—one or more producers and financial backers, a distributor and the buyer (a broadcast television station, cable network, or foreign network)—and indirect participants, such as the programmers at the national station representative firms. All must

6.1 Types of Syndicated Programs

ff-Network: Friends, Seinfeld, Everybody Loves Raymond, CSI: Crime Scene Investigation, The Parkers, King of Queens. (Note that—just to confuse viewers—off-network shows may run simultaneously with new episodes on the broadcast network and with reruns or multiplexed episodes on cable networks and in off-network syndication.)

First-Run: Dr. Oz, Ellen, Dr. Phil, Rachael Ray, Jerry Springer, Entertainment Tonight, Jeopardy!, Wheel of Fortune, Judge Judy.

Off-Cable: Nip/Tuck (from FX to Logo), Stargate SG1.

Feature Films: Nearly any movie title once it leaves the movie theaters except recent movies still playing on payper-view, pay cable or a broadcast network before they go into syndication.

6.2 Eight Common Syndicated Genres

- Situation comedy. Most sitcoms are off-network (for example, Friends, Family Guy, Seinfeld, Everybody Loves Raymond, The Simpsons), although in the distant past some were created for first-run syndication—for example, some episodes of Mama's Family and all episodes of Small Wonder.
- Drama. These may be off-network (Criminal Minds, Monk, Ugly Betty, CSI), off-cable (Sex and the City, Stargate SG1), or first-run (Star Trek: Voyager) and may include action-adventure/sci-fi shows (24, Alias) and dramatic shows (Dawson's Creek, The X-Files). Although these shows were nearly all one hour long, a rare few are half-hour shows.
- Talk. Generally these are first-run, one-hour shows.
 They include Dr. Oz, Dr. Phil, Maury, The Jerry Springer Show and others.
- Magazine. Most commonly half-hour, first-run programs, these include Entertainment Tonight (ET), Access Hollywood, TMZ on TV and Extra. This

- category also includes the weekend editions of the same programs: ET Weekend, for example.
- Reality. This category is a catchall comprised mostly of first-run half hours (although the occasional first-run hour creeps in) and includes health shows (The Doctors, Dr. Oz), court shows (The People's Court, Judge Judy, Judge Joe Brown, Divorce Court), comedy shows (Man Up Stand Up), music shows (videos, dance music), and comedy-based shows (America's Dumbest Criminals).
- Games. These half-hour, first-run shows include "pure" game shows (Jeopardy!, Wheel of Fortune) and celebritydriven, humor-based shows where the entertainment value is often more important than the game itself (Family Feud).
- Weekly. This category includes virtually all the aforementioned program types, but the shows are first-run and designed for broadcast once or twice a week, generally on Saturdays or Sundays (Dog the Bounty Hunter, Man Up Stand Up). Thanks to competition from cable networks, many stations run filler or infomercials.

6.3 Children's Genre

For years, children's programming was dominated by syndicated programs from a variety of companies; then production shifted to the networks. In recent years, syndication of children's programming has virtually ceased to exist. Kids' CW consists mainly of sitcoms and youth dramas that originally aired on CW/WB. Fox Kids has been rebranded as 4KidsTV and is children-oriented programming on Saturday mornings on FOX stations. The children's syndication business today is virtually nonexistent. The few syndicated kids programs that are available come from DIC Entertainment and independent producers (such as

Litton) and are aired by stations seeking to fulfill FCC-mandated educational/instructional programming on weekends, often in early-morning time periods.

Along with public television, cable networks, especially Cartoon Network, Disney Channel and Nickelodeon, are the major forces for reaching kid viewers nowadays. Whether provided by the networks or acquired through syndication, children's programs fall into several basic categories: animation (SpongeBob SquarePants, Fairly Odd Parents), live action (iCarly, Big Time Rush), and theatrical cartoons (Bugs Bunny, Tom and Jerry).

talk in a mutually understood language. Although several systems for classifying programs exist, syndicators and programmers commonly use eight easily recognized genre categories (see 6.2). Children's programs used to be another major category of syndication, but no longer (see 6.3).

The Producer and **Production Company**

Many people think of producers as cigar-smoking, fast-talking, jewelry-bedecked guys "taking meetings" by the pool. A few may fit this description,

but most would not stand out in a crowd. Actually, the producer—or showrunner—is the person who coordinates the diverse elements that constitute a television program. In some production companies, this person is called the executive producer; in others he or she is the line producer. Showrunners (or executive producers) oversee on-air talent, directors, writers, technical crew, line producers, production managers, production assistants and researchers. They "run the show" as the on-the-set boss and often come from a writer background. Showrunners often deal with talent agents, personal managers, union officials, the press and lawyers. They are answerable for everything: the program concept, the program content, the tone or mood of the program—in other words, the overall production.

A production company finances and produces television programs, hiring the showrunner and the staff and possibly proposing program ideas or financing the producers who bring in the ideas. Based on a pilot, maybe, or merely a written presentation, the production company sells programs directly to broadcast or cable networks or, alternatively, strikes a deal with a syndication company to distribute (syndicate) its programs to individual television stations. Often the production company is the syndicator itself and distributes the programs it has created.

The decision to begin production of a new program depends on (a) whether a broadcast or cable network is interested in the idea and advances development funds (see Chapters 4 and 9) or (b) whether the program is suitable for domestic and foreign syndication. U.S. cable and sales to foreign television networks are a crucial *aftermarket* for off-network programs and theatrical movies.³

For many years, hour-long dramatic shows had only modest syndication potential even after network airing, but such cable channels as TNT, USA, A&E and Spike have shifted to off-network dramas for early evening and prime-time weeknights (for example, Law & Order, CSI, Without a Trace), raising the prices for long runs of such hour-long series. Comedy has always been a gold mine, although most programmers insist that sitcoms must have young adult and youth appeal to succeed

in syndication. Network carriage is important for giving a program high visibility, but syndication is where the profits lie.

The Syndicator

Although some syndicators produce programs and others merely handle programs produced by other companies, all syndicators (also called *distributors*) supply programming to local stations on a market-by-market basis throughout the nation. Unlike ABC, CBS, FOX, NBC, CW, ION, MNTV, TeleFutura, Telemundo and Univision, syndicators do not have a single "affiliate" in any particular market. However, just to make things complicated, the parent companies of ABC, CBS, FOX, NBC and Univision also operate syndication companies as separate entities and generally forge strong relationships with affiliates of the parent corporation if possible. Nonetheless, syndicators can and often do sell their programming to any and all stations in a market.

Depending on the kind of programs offered by the syndicator, certain stations in a market may be more frequent customers than other stations. For example, some affiliates build programming blocks around game shows, others around talk shows. Although the syndicator may have more than one customer in a market, only one station is licensed to carry any particular program at a time. Thus, one station may license such first-run syndicated programs as Dr. Oz and Dr. Phil from King World (owned by Viacom/CBS); a second station in the same market may license Inside Edition and Bob Vila's Home Again, also from King World, and a third station in the same market may simultaneously license syndicated reruns of Everybody Loves Raymond and CSI, again from King World. And it's very likely that King World's Wheel of Fortune and *leopardy!* have been airing on one of these stations for decades.

Each station will have the exclusive right in its local market to all episodes of the series it bought during the term of the license. And because it means more money, the syndicator King World may try to upgrade the time period of one or more of these shows from a lesser-rated to a higher-rated time slot

(even though the show may compete against another King World program on another station in the market). Syndicators also try to upgrade a show from a weaker station to a stronger station. For the syndicator, such upgrades usually result in more income from higher license fees, as well as higher rates for barter spots because of higher ratings. So station programmers must look to their own self-interest and be a bit wary of syndicators.

The United States used to have dozens of domestic syndication companies, but the number has declined in recent years after many mergers. There are also scores of other syndicators worldwide. All major domestic program syndicators and their hottest properties in the mid-2010s are listed in 6.4. Offnetwork hits such as *Seinfeld*, *Family Guy* and *Everybody Loves Raymond* average as high as \$2 to \$3 million per episode in combined syndicated revenue (from all stations). Of the firms in 6.4, six companies command more than three-quarters of the domestic syndication business: CBS Television Distribution, Disney-ABC Domestic Television, NBCUniversal Television, Sony Pictures Television, Twentieth Television and Warner Brothers Domestic Television

Distribution. All the other very large syndicators are divisions of the Hollywood studios.

Syndicators "sell" (license for a fee, hence license fee) the telecast rights to a program to a local station for a certain term and for a set number of plays. The syndicator or the producer of the program continues to own the rights to the show. Syndicators get a commission for distribution, and they can increase their revenues by selling national barter time (advertising spots) within the programs they handle. At the end of the license term, the broadcast rights revert to the syndicator, who may now license the program all over again to any station in the market, including the station that ran the program in the first cycle or any of its competitors. This occasionally results in some weird station-hopping by old shows.

The syndicator's client is both the group owner and the local television station or the cable network. After the FCC relaxed limitations on ownership of television stations in terms of both the percentage of the U.S. population covered and the number of stations permitted under common ownership in a single market, the dynamics of the sales process changed.

6.4 Program Syndicators

Syndicators	Programs					
Carsey-Werner	That '70s Show, 3rd Rock from the Sun, The Cosby Show, Roseanne					
CBS Television Distribution	Dr. Oz, Dr. Phil, Wheel of Fortune, Jeopardy!, Judge Judy, ET, Rachael Ray					
Disney-ABC Domestic Television	My Wife and Kids, According to Jim, Alias, Scrubs, Less Than Perfect, 8 Simple Rules, Who Wants to Be a Millionaire?, Disney movies					
DLT Entertainment Ltd.	Benny Hill, Three's Company, The Ropers					
Hearst Entertainment & Syndication	The Bravest, Popular Mechanics for Kids, movies, cartoons					
Litton Entertainment	Storm Stories, Jack Hanna's Into the Wild					
MGM Domestic Television	Cash Cab, Stargate Universe, Stargate Atlantis, movies					
NBCUniversal Television Distribution	30 Rock, The Office, Access Hollywood, House, Law & Order, Maury, The Jerry Springer Show					
Sony Pictures Television	Seinfeld, The Nanny, Married with Children, Who's the Boss?, movies					
Trifecta	Punk'd, The Hills, Geek Meets Girl, Last Shot with Judge Gunn					
Twentieth Television	Family Guy, How I Met Your Mother, That 70's Show, Are You Smarter than a					
	5th Grader?, Don't Forget the Lyrics, Divorce Court, Judge Alex, movies					
Warner Brothers Domestic Television	Ellen, TMZ, The People's Court, Modern Family, Big Bang Theory, Without a					
Distribution	Trace, movies					